



Banff International Research Station

2015 Calendar

JANUARY

- 1/11 - 1/16 Modern Applications of Complex Variables: Modeling, Theory and Computation: L. Cummings (New Jersey IT), S. Llewellyn Smith (UC, San Diego), P. Martin (Colorado School of Mines), B. Protas (McMaster)
- 1/18 - 1/23 Random Dynamical Systems and Multiplicative Ergodic Theorems: B. Goldys (U. Sydney), C. Gonzalez-Tokman (U. New South Wales), A. Quas (UVic)
- 1/25 - 1/30 Mathematics of Communications: Sequences, Codes and Designs: S. Gurevich (Wisconsin-Madison), J. Jedwab (SFU), D. Jungnickel (U. Augsburg), V. Tonchev (Michigan Tech)

FEBRUARY

- 2/1 - 2/6 Partial Differential Equations in Cancer Modelling: R. Gatenby (Moffitt Cancer Centre), T. Hillen (U. Alberta), P. Hinow (Wisconsin-Milwaukee)
- 2/8 - 2/13 Discrete Geometry and Symmetry: K. Bezdek (U. Calgary), A. I. Weiss (York), E. Schulte (Northeastern)
- 2/15 - 2/20 Advances in Numerical Optimal Transportation: J-D. Benamou (INRIA), Y. Brenier (École Polytechnique), A. Oberman (McGill)
- 2/22 - 2/27 Hypercontractivity and Log Sobolev Inequalities in Quantum Information Theory: P. Hayden (McGill), C. King (Northeastern), A. Montanaro (U. Bristol), M. B. Ruskai (Waterloo)

MARCH

- 3/1 - 3/6 Between Shannon and Hamming: Network Information Theory and Combinatorics: M. Effros (Caltech), S. Jaggi (CUHK), F. Kschischang (U. Toronto), M. Langberg (SUNY, Buffalo)
- 3/8 - 3/13 Computability, Analysis and Geometry: M. Braverman (Princeton), M. Yampolsky (U. Toronto)
- 3/15 - 3/20 Distribution of Rational and Holomorphic Curves in Algebraic Varieties: J. Lewis (U. Alberta), S. Lu (UQAM), M. Roth (Queen's), M. Ru (U. Houston)
- 3/22 - 3/27 Laplacians and Heat Kernels: Theory and Applications: D. Grebenkov (École Polytechnique), P. Jones (Yale), N. Saito (UC, Davis)
- 3/29 - 4/3 Perspectives on Parabolic Points in Holomorphic Dynamics: A. Cheritat (Paul Sabatier), A. L. Epstein (U. Warwick), C. L. Petersen (Roskilde U.)
- 3/29 - 4/3 Towards a Unified Treatment of Dynamic Graphs: N. Harvey (UBC), V. King (UVic), A. McGregor (U. Massachusetts), M. Thorup (U. Copenhagen)

APRIL

- 4/5 - 4/10 Multivariate Operator Theory: K. R. Davidson (Waterloo), R. G. Douglas (Texas A&M), J. Eschmeier (U. Saarlandes), J. W. Helton (UC, San Diego), M. Putinar (UC, Santa Barbara)
- 4/12 - 4/17 Geometric Flows: Recent Developments and Applications: G. Huisken (Fachbereich), J. Streets (UC, Irvine), P. Topping (U. Warwick), T. Wiseman (Imperial College London), E. Woolgar (U. Alberta)
- 4/19 - 4/24 New Perspectives for Relational Learning: D. Lowd (U. Oregon), S. Natarajan (Indiana U., Bloomington), D. Poole (UBC), O. Schulte (SFU)
- 4/26 - 5/1 Stochasticity and Organization of Tropical Convection: B. Khouider (UVic), A. J. Majda (NYU), C. Zhang (Miami)

MAY

- 5/3 - 5/8 Groups and Geometries: I. Capdebosq (U. Warwick), M. Liebeck (Imperial College London), B. Muehlherr (U. Giessen)
- 5/10 - 5/15 Higher Order Numerical Methods for Evolutionary PDEs: Applied Mathematics Meets Astrophysical Applications: C. Klingenberg (Wurzburg U.), C-W. Shu (Brown), V. Springel (Heidelberg Institute for Theoretical Studies)
- 5/17 - 5/22 Dispersive Hydrodynamics: The Mathematics of Dispersive Shock Waves and Applications: M. Ablowitz (CU, Boulder), G. Biondini (SUNY Buffalo), G. El (Loughborough U.), M. Hoefer (North Carolina State U.)
- 5/24 - 5/29 Geometric Unification from Six-Dimensional Physics: M. Hopkins (Harvard), D. Nadler (UC, Berkeley), A. Neitzke (UT, Austin), T. Nevins (U. Illinois, Urbana-Champaign)
- 5/31 - 6/5 Applied Probability Frontiers: Computational and Modeling Challenges: S. Henderson (Cornell), D. Iglehart (Stanford), T. Kurtz (Wisconsin-Madison), P. L'Ecuyer (U. Montréal), A. Ward (USC), A. Zeevi (Columbia)

JUNE

- 6/7 - 6/12 Advances and Challenges in Protein-RNA: Recognition, Regulation and Prediction: Y. Mandel-Gutfreund (Technion), G. Varani (U. Washington)
- 6/14 - 6/19 Hybrid Methods in Imaging: G. Bal (Columbia), F. Guevara Vasquez (U. Utah), P. Kuchment (Texas A&M), L. Kunyansky (U. Arizona), G. Uhlmann (U. Washington)
- 6/21 - 6/26 Groups, Graphs and Stochastic Processes: M. Abert (Alfréd Rényi Institute of Math), O. Angel (UBC), B. Virag (U. Toronto)
- 6/28 - 7/3 Frontiers in Functional Data Analysis: D. Paul (UC, Davis), S. Ray (U. Glasgow), D. Ruppert (Cornell)

JULY

- 7/5 - 7/10 Beyond I.I.D. in Information Theory: N. Datta (Cambridge), R. Renner (ETH Zürich), M. M. Wilde (Louisiana State U.), A. Winter (Universitat Autònoma de Barcelona)
- 7/12 - 7/17 Advances in Combinatorial and Geometric Rigidity: R. Connelly (Cornell), S. J. Gortler (Harvard), T. Jordan (Eotvos), B. Servatius (Worcester Polytechnic), M. Sitharam (U. Florida), W. Whiteley (York)
- 7/19-7/24 Combinatorics Meets Ergodic Theory: N. Frantzikinakis (Crete), B. Kra (Northwestern), J. Wolf (U. Bristol)
- 7/26 - 7/31 Developments in the Theory of Homogenization: I. Kim (UC, Los Angeles), C. Le Bris (École Nationale des Ponts et Chaussées), F-H. Lin (NYU), P. Souganidis (U. Chicago), Y. Yu (UC, Irvine)

AUGUST

- 8/2 - 8/7 Statistical and Computational Challenges in Bridging Functional Genomics, Epigenomics, Molecular QTLs, and Disease Genetics: L. Jacob (CNRS), M. Kellis (MIT), A. Labbe (McGill), S. Montgomery (Stanford), I. Ostrovna (Memorial Sloan-Kettering Cancer Center), I. Ruczinski (Johns Hopkins)
- 8/9 - 8/14 Factorizable Structures in Topology and Algebraic Geometry: G. Arone (U. Virginia), D. Ayala (Harvard), J. Francis (Northwestern), D. Gaiatsgory (Harvard), O. Gwilliam (UC, Berkeley)
- 8/16 - 8/21 Lifting Problems and Galois Theory: F. Bleher (Iowa), T. Chinburg (Pennsylvania), A. Obus (U. Virginia), R. Pries (Colorado State U.)
- 8/23-8/28 Methods and Challenges in Extremal and Probabilistic Combinatorics: P. Haxell (Waterloo), M. Krivelevich (Tel Aviv), B. Sudakov (UC, Los Angeles)
- 8/30 - 9/4 New Trends in Nonlinear Elliptic Equations: M. Chipot (U. Zürich), I. Shafrir (Technion)

SEPTEMBER

- 9/6 - 9/11 Nichols Algebras and Their Interactions with Lie Theory, Hopf Algebras and Tensor Categories: N. Andruskiewitsch (Universidad Nacional de Colombia), P. Etingof (MIT), I. Heckenberger (Philipps-Universität Marburg), J. Pevtsova (U. Washington), S. Witherspoon (Texas A&M), J. Zhang (U. Washington)
- 9/13 - 9/18 The Use of Linear Algebraic Groups in Geometry and Number Theory: S. Garibaldi (UC, Los Angeles), N. Lemire (Western Ontario), R. Parimala (Emory), K. Zainoulline (U. Ottawa)
- 9/20 - 9/25 Strongly Interacting Topological Phases: J. Alicea (Caltech), M. Fisher (UC, Santa Barbara), M. Franz (UBC), Y-B. Kim (U. Toronto)
- 9/27 - 10/2 Approximation of High-Dimensional Numerical Problems - Algorithms, Analysis and Applications: C. Lemieux (Waterloo), I. H. Sloan (NSW), H. Wozniakowski (Columbia)

OCTOBER

- 10/4 - 10/9 The Geometry, Algebra and Analysis of Algebraic Numbers: F. Amoroso (U. Caen), I. Pritsker (Oklahoma State U.), C. Smyth (Edinburgh), J. Vaaler (UT, Austin)
- 10/11 - 10/16 Mathematical Coding Theory in Multimedia Streaming: H. Gluesing-Luerssen (Kentucky), A. Khisti (U. Toronto), J. Rosenthal (U. Zürich), E. Soljanin (Bell Labs)
- 10/18 - 10/23 Multiscale Modeling of Cell Wall Mechanics and Growth in Walled Cells: A. Geitmann (U. Montréal), K. Huang (Stanford)
- 10/25 - 10/30 Viscoplastic Fluids: From Theory to Application: J. de Bruyn (Western Ontario), I. Frigaard (UBC), S. Gonzalez Andrade (ModeMat), I. Ionescu (Université Paris 13), M. Moyers Gonzalez (Canterbury)

NOVEMBER

- 11/1 - 11/6 Women in Geometry: A. Fraser (UBC), C. Searle (Oregon State U.), E. Stanhope (Lewis & Clark)
- 11/8 - 11/13 Homogeneous Structures: C. Laflamme (U. Calgary), L. Nguyen Van The (U. Aix-Marseille), S. Todorcevic (U. Toronto), R. Woodrow (U. Calgary)
- 11/15 - 11/20 Current and Future Challenges in Robust Statistics: R. Carroll (Texas A&M), L. Fernholz (Temple), S. Marron (U. North Carolina, Chapel Hill), M. Salibian-Barrera (UBC), J. Verducci (Ohio State U.), R. Zamar (UBC)
- 11/22 - 11/27 International Math Outreach Workshop: M. Alvarez (PIMS), H. Barcelo (MSRI), J-M. De Koninck (Mitacs), M. Grasselli (Fields), J. McIntosh (Australian Mathematical Sciences Institute), L. Vinet (CRM)
- 11/22 - 11/27 BIRS First Nations Math Education: M. Alvarez (PIMS), G. Fox (First Nations Alberta Education), S. Friesen (U. Calgary), C. Nicol (UBC)
- 11/29 - 12/4 Approximation Algorithms and Parameterized Complexity: M. Fellows (Charles Darwin U.), S. Hadas (Technion), K. Jansen (Kiel), R. Solis-Oba (Western Ontario)

DECEMBER

- 12/6 - 12/11 Connecting Network Architecture and Network Computation: A. Barreiro (Southern Methodist), M. Chacron (McGill), B. Doiron (U. Pittsburgh), C. Eliasmith (Waterloo), K. Josic (U. Houston), E. Shea-Brown (U. Washington)

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